Computer Accessibility

This list is not intended to endorse a specific vendor. GSTS, Key Technologies, Inc. and Dunamis, Inc. are regional vendors and may provide training.

The specific need for assistive technology is unique to the individual. "Trial-and-error may be required to find a set of appropriate tools and techniques. The end user—the person with a disability—should play a key role in determining what works best" (Burgstahler & Comden, 2002). For further information, equipment loan or consultation, call the South Carolina Assistive Technology Program, Evelyn Evans, Director, (803) 935-5263, www.sc.edu/scatp.

Disability	AT/Accommodations	Products/Vendors	Comments
Vision Impairment	High Contrast	MS Windows Accessibility Options	Allows user to change colors and fonts for easy reading (start-control panel-accessibility options).**
	Cursor Options	MS Windows Accessibility Options	Changes the speed that the cursor blinks and the width of the cursor (start-control panel-accessibility options).
	Toggle Keys	MS Windows Accessibility Options	Produces a tone when pressing CAPS LOCK, NUM LOCK, SCROLL LOCK (start-control panel-accessibility options).
	Narrator	MS Windows Accessibility Options (MS Windows 2000 or higher)	Reads aloud menu commands, dialog box and more (start-all programs-accessories-accessibility).
	Magnifier	MS Windows Accessibility Options (MS Windows 98 or higher)	Provides variable magnification settings and allows user to invert color (start-all programs-accessories-accessibility).
	Large Screen Fonts	MS Windows Display Settings	Provides large fonts on the screen (start-control panel-display-appearance).

Vision Impairment (continued)	Large Monitor (19" or larger)	Retail store (Best Buy, Circuit City, etc.) or designated procurement manufacturer	
	Large Print Keyboard Key Labels	Zoom Caps/ <u>maxiaids.com</u> , <u>donjohnston.com</u> Large Print Keytop Labels/ <u>infogrip.com</u>	Labels for top of keys on keyboard. Includes all alpha-numeric characters. Available in various color combinations.
	Glare Guard	Retail store (Office Max, Staples, etc.) or designated procurement manufacturer	A screen placed in front of a computer display screen which reduces glare and helps the user avoid eyestrain and enhances readability.
	Large Cursor	Microsoft Pointer Options	Allows user to change cursor size and add trailers (Start-Control Panel- Mouse-Pointer Options)
		Biggy/rjcooper.com	Provides selection of ultra-visible cursors that work within any software.
	Screen Magnification	Press "Ctrl" and scroll mouse wheel	Enlarges screen items, including web pages.
	Screen Magnification Software	Zoom Text Xtra Level 1/ <u>aisquared.com</u> , <u>infogrip.com</u> MAGic® Screen Magnifier-No Speech/ <u>infogrip.com</u> , <u>freedomscientific.com</u> BigShot/ <u>aisquared.com</u>	Full and partial screen enlargement.
	Screen Magnification Software with Screen Reader	Zoom Text Xtra Level 2/ <u>aisquared.com</u> , <u>infogrip.com</u>	Full and partial screen enlargement with screen reader.
		MAGic® Screen Magnifier-With Speech/ infogrip.com	Limited screen reader capability. Compatible with screen reader software (i.e. JAWS® for Windows)

Vision Impairment (continued)	High Contrast Colors	MS Windows Display Settings	Allows selection of high contrast colors to enhance screen readability (start-control panel-display-appearance).
	Colors Compatible for People with Color Blindness	MS Windows Display Settings	Allows selection of various colors to enhance screen readability (start-control panel-display-appearance).
Blindness	Screen Reader	JAWS® for Windows/ GSTSdesigns.com, freedomscientific.com, maxiaids.com WYNN TM /freedomscientific.com, donjohnston.com, gokeytech.com	Makes documents, Internet and commands audible. JAWS® has output to refreshable Braille displays.
	OCR (Scanner)	Retail store (Office Max, Staples, etc.) or designated procurement manufacturer	Reads text from paper and translates into a computer document.
	Braille Embosser	Romeo BR-25/ <u>Enabling</u> <u>Technologies.com</u> , Juliet Pro/ <u>Enabling</u> <u>Technologies.com</u> , Basic-D, <u>Sighted</u> <u>Electronics.com</u>	Includes regular Braille graphics, high- resolution Braille graphics, and Dynamic Braille Scaling. Select increased line spacing. Juliet Pro and Basic-D emboss two sides of a sheet of paper.
	Braille Keytops for Keyboard	Braille Keytop Labels/ <u>maxiaids.com</u>	Provides Braille stickers for application to surface of keyboard keys.
	Headphones	Retail store (Office Max, Staples, etc.) or designated procurement manufacturer	Allows use of auditory features without disturbing others nearby.
Deafness/ Hearing Impairment	Sound Sentry	MS Windows Accessibility Options	Provides visual warnings when your system makes a sound (start-control panel-accessibility options).
	Show Sounds	MS Windows Accessibility Options	Allows programs to show captions for the speech and sounds they make (start-control panel-accessibility options).

Deafblind	Refreshable Braille Display	Focus 44 Braille Displays/ freedomscientific.com, Braille Star 40/pulsedata.com	Displays Braille characters by means of raising the dots through holes in a flat surface.
Mobility Impairment	Computer Location Accessible for Wheelchairs		Accommodates a wheelchair for access to the monitor, keyboard and mouse.
	Adjustable Computer Workstation	Accessible Computer Station/ <u>dbhattachments.com</u> Sit/Stand/Recline Computer Workstation/ <u>ergoquest.com</u>	Accommodates a wheelchair for access to the monitor, keyboard and mouse.
	Wireless Keyboard and Mouse	Logitech Cordless/ <u>logitech.com</u> Retail store (Best Buy, Circuit City, etc.) or designated procurement manufacturer.	Allows computer access from a distance.
Manual Dexterity Impairment	Adjustable Computer Workstation	Accessible Computer Station/dbhattachments.com	Accommodates the wheelchair for access to the monitor, keyboard and mouse.
impuniment	Ergonomic Chair	Retail store (Office Max, Staples, etc.) or designated procurement manufacturer	Facilitates correct positioning to reduce fatigue and facilitate access.
	Foot Rest	Adjustable Foot Rest or Footrester/ infogrip.com	Redistributes body weight to decrease strain and fatigue on legs, back and neck.
	Keyguard for Keyboard	turningpointtechnology.com, techable.org	Maximizes physical access to accurately target keys on the keyboard. Makes customized keyguards.
	Trackball Mouse	Retail store (Best Buy, Circuit City, etc.) or designated procurement manufacturer. Traxsys Trackball Plus/ GSTSdesigns.com, infogrip.com, donjohnston.com, dunamisinc.com, gokeytech.com	Includes buttons that support right and left click, double click, drag lock, horizontal and vertical lock, and cursor speed control.

Manual Dexterity Impairment	Orbit Optical Trackball Mouse	Kensington Orbit Optical Trackball mouse/kensington.com	Allows the user to control the cursor with a simple touch of the finger.
(continued)	Joystick Mouse Emulator	Retail store (Best Buy, Circuit City, etc.) or designated procurement manufacturer. Traxsys Joystick Plus/ GSTSdesigns.com, infogrip.com, donjohnston.com, dunamisinc.com, gokeytech.com	Includes buttons that support right and left click, double click, drag lock, horizontal and vertical lock, and cursor speed control. Roller Plus products include a key guard to help users isolate the buttons.
	Alternative Keyboard	Expanded keyboard with keyguard: Big Keys/bigkeys.com, dunamisinc.com, gokeytech.com Intellikeys ® /intellitools.com, dunamisinc.com, gokeytech.com	Includes simplified keyboard with large keys. QWERTY or alphabetized key arrangements are available.
		Ergonomic keyboards: Retail store (Best Buy, Circuit City, etc.), designated procurement manufacturer, or infogrip.com, maltron.com	Helps prevent cumulative trauma disorders. Some models have flexibility to accommodate specific disabilities.
		Mini keyboards: tashinc.com, GSTSdesigns.com	Allows access with minimal movement. Can control both keyboard and mouse functions. Can be used with mouthstick or head pointer.
	One-Handed Typing	Half-Qwerty Typing Software/half- qwerty.com	Facilitates the transfer of two-handed typing skill to the one-handed condition. Typing is performed on a standard keyboard.
		Half-Qwerty Keyboard/ <u>half-qwerty.com</u>	Incorporates Half-Qwerty software into a standard keyboard that can be used for either one- or two-handed typing.

Manual Dexterity Impairment (continued)		Maltron Single-Handed Keyboard/maltron.com Bat Keyboard/infogrip.com	Replicates all the functions of a full-size keyboard, but with greater efficiency and convenience. Keyboard arrangement minimizes finger movement.
	Arm and Wrist Supports	Articulating Arm Supports/ Ergorest Arm Supports/ <u>infogrip.com</u>	Provides comfortable arm, shoulder and neck support with unrestricted motion. Muscle tension in the neck and shoulders can be significantly reduced.
	Touch Monitor	gokeytech.com, Keytec, Inc./magictouch.com	Allows the user to make selections, move objects, and pull down menus with the touch of a finger on the monitor screen.
	Touch Window	infogrip.com, dunamisinc.com	Attaches to a computer monitor. Allows the user to make selections, move objects, pull down menus with the touch of a finger.
	EZ Keys	gokeytech.com, Words +/words-plus.com	Provides text-based voice output with word prediction. Stores user-made phrases. A variety of access modes, including standard keyboard, expanded keyboard, joystick, mouse, single and multiple switch scanning, and Morse code, are available.
	Sticky Keys	MS Windows Accessibility Options	Allows one-handed typists to use SHIFT, CTL, ALT keys with other keys sequentially rather than simultaneously (start-control panel-accessibility options).
	Filter Keys	MS Windows Accessibility Options	Ignores brief or repeated key strokes or slows the repeat rate (start-control panel-accessibility options).

Lack of Manual Dexterity (continued)	Mouse Keys	MS Windows Accessibility Options	Uses the numeric keypad to control the movement of the cursor (start-control panel-accessibility options).
	Word Prediction Software	Co:Writer®/donjohnston.com EZ Keys™ for Windows/ gokeytech.com, Words +/words-plus.com	Predicts the word you are typing and the next word based on word frequency and context. May also include features such as spell check, speech synthesis, and hotkeys for frequently used words.
	Auto correct	Microsoft Word	Allows the user to set up auto corrections to use fewer keystrokes when typing frequently used words or phrases. In Word, go to "Tools", then "AutoCorrect Options."
	Switches	Tash/tashinc.com, Ablenet/ablenet.com, GSTSdesigns.com, gokeytech.com zygo-usa.com, allegromedical.com	With appropriate software, allows user to access a computer with a switch.
	Head/Chin Pointer	Head Mouse® Extreme/orin.com	Attaches pointer to head with straps.
	Electronic Pointing Device		Replaces a standard computer mouse for people who cannot use their hands. The wireless sensing technology employs infrared light to track the user's head movements.
	Mouthstick	mouthstick.net	Allows user to type or manipulate items by using a stick controlled by mouth.
	Typing Aid or Typing Pointer	Typing Aid/westons.com, activeforever.com, secureic.getontech.com	Straps to hand. Extending wand strikes keys.
	Foot Mouse	No Hands Mouse/ <u>abilityhub.com</u> , I/O Foot Mouse/ <u>iotest.net</u>	Eliminates wasteful, repetitive "keyboard-to-mouse" hand movements.

Lack of Manual Dexterity (continued)	Voice Input Software	Microsoft Office	Turns speech into text for use with Microsoft Office products. Set up through the "Tools" pull-down menu in Word. Go to Microsoft.com/enable for a tutorial.
		Dragon Naturally Speaking/ <u>nuance.com</u> , <u>GSTSdesigns.com</u> , <u>maxiaids.com</u>	Turns speech into text. The user can create documents, enter data, launch applications, send e-mail, complete forms, and browse the Web. Various editions available based on profession and needs. Training required.
	On-Screen Keyboard	MS Windows Accessibility Options (MS Windows 2000 or higher)	Allows users to mouse click, hover, scan, or use joystick to select key (start - all programs - accessories - accessibility).
		Softtype/ <u>orin.com</u> , <u>GSTSdesigns.com</u>	Integrates AutoClick TM and Dragger TM for performing clicking functions by dwell selection, multiple keyboard layouts, word completion with customizable word list, and excellent companion for HeadMouse® or other mouse emulators.
	Microphone	Parrott Talk Pro USB/GSTSdesigns.com	Provides high quality voice input for maximum accuracy with use of voice-to-text software (i.e. Dragon Naturally Speaking).
	Abbreviation Expansion	Microsoft Office	A series of letters or words can be assigned to two or more keystrokes (Tools-AutoCorrect Options)
Vision and Manual Dexterity	Middle Software	Jaw Bone/ <u>GSTSdesigns.com</u> , <u>maxiaids.com</u> , <u>synapseadaptive.com</u>	Allows Dragon Naturally Speaking and Jaws® to work together.
Impairment	Screen Magnification Software with Screen Reader	Zoom Text Xtra Level 2/ <u>aisquared.com</u> , <u>infogrip.com</u>	Provides full and partial screen enlargement with screen reader.

Cognitive impairment	Text to Voice Software	Microsoft Office	Speaks typed text in Microsoft Office documents. Set up through the "Tools" pull-down menu in Word. Go to Microsoft.com/enable for a tutorial.
		Wynn TM / <u>freedomscientific.com</u> , gokeytech.com, Kurzweil/ <u>kurzweiledu.com</u>	Adds auditory component to written material to facilitate understanding.
	Language at the Third Grade Level	Microsoft Word Options	Includes a Flesch-Kincaid readability grade level, which is shown in the summary after spell check is completed (In Microsoft Word document: tools-options-spelling/grammar-check "readability statistics").
	Word Prediction Software	Co:Writer®/donjohnston.com EZ Keys™ for Windows/ gokeytech.com, Words +/words-plus.com	Provides opportunity for sight-reading difficult-to-spell words. Predicts the word you are typing and the next word based on word frequency and context. May also include features such as spell check, speech synthesis, and hotkeys for frequently used words.

- Before ordering additional software, review built-in accessibility options. See Accessibility Wizard (MS Windows 2000 or higher: start all programs accessories accessibility).
- Use the latest software version and install updates as available.
- Software that includes text to speech features (ex.: Zoom Text 2) may not work while JAWS® is active.
- Dragon Naturally Speaking dominates the sound card for its sole use; therefore, the sound feature may not be available in other software programs.
- **Path for Microsoft Accessibility Options is for "Classic" rather than "Category" view in XP. Windows Vista has an "Ease of Access" Center rather than the "Accessibility Options" icon.

Regional Vendors:

GSTS

2075 Bald Hill Loop Madison, NC 27025 (336) 427-8765) GSTSdesigns.com **Key Technologies, Inc.**

P.O. Box 1997 Morganton, North Carolina 28680-1997 (888) 433-5303 Gokeytech.com **Dunamis, Inc.**

3545 Cruse Road, Suite 312 Lawrenceville, GA 30044 (800-828-2443) dunamisinc.com

Voluntary Product Accessibility Template (VPAT) – Procurement Tool

The Information Technology Industry Council (ITI) partnered with the US General Services Administration (GSA) to create an Internet-based tool to assist in procurement of the most accessible IT products and services in order to conform to Section 508.

The ITI hosts the template tool on their site allowing vendors (who choose to participate) to copy the template and complete it describing how their particular product or service conforms to Section 508 standards. The template is then placed on the vendor's web site, linked to the Buy Accessible database. The vendors maintain their own information on their site.

The Buy Accessible data base can be searched by specific product or service to see all vendors who have provided links. To access "Buy Accessible Products" and "Buy Accessible Services" go to: http://www.section508.gov/index.cfm?FuseAction=Content&ID=2.

Reference

Burgstahler, S. & Comden, D. (2002). Working together: Computer technology and people with mobility & sensory impairments. Exceptional Parent Magazine, p. 36.